

SAFETY DATA SHEET

SDS0089AU-F

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name Smoke Centurion.
Trade Name M8 Smoke-01-XXX (XXX denotes customer variant).
CAS No. Mixture.
EINECS No. Mixture.
REACH Registration No. None assigned.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified use(s) Smoke simulation.
Uses advised against None known.

1.3 Details of the supplier of the safety data sheet

Company Identification FlameStop Australia, 13 Chaplin Street, Lane Cove, NSW, 2066.
Telephone 02 9932 2020
Fax 02 9932 2022
E-mail sales@flamestop.com.au

1.4 Emergency telephone number

Emergency Phone No. 0425 342 729

1.5 Details of the manufacturer

Company Identification Detectortesters (No Climb Products Ltd), Edison House, 163 Dixons Hill Road, Welham Green, Hertfordshire. AL9 7JE. United Kingdom
Telephone +44 (0) 1707 282760
Fax +44 (0) 1707 282777
E-mail SDS@detectortesters.com

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to GHS 3rd revised edition Aerosol 1; Extremely flammable aerosol.
Pressurised container: May burst if heated.

2.2 Label elements

Hazard Pictogram(s) According to GHS 3rd revised edition



GHS02

Signal Word(s) Danger.
Hazard Statement(s) H222: Extremely flammable aerosol.
H229: Pressurised container: May burst if heated.
Precautionary Statement(s) P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
P211: Do not spray on an open flame or other ignition source.
P251: Do not pierce or burn, even after use.
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.

2.3 Other hazards

None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product as supplied: Aerosol.

3.1 Mixtures

GHS 3rd Revised Edition

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard Pictogram(s) and Hazard Statement(s)
Butane	50 – 100	106-97-8	203-448-7	01-2119474691-32	GHS02, Flam. Gas 1; H220, GHS04, Press. Gas: Liquefied gas; H280
Propane	10 – 25	74-98-6	200-827-9	01-2119486944-21	GHS02, Flam. Gas 1; H220, GHS04, Press. Gas: Liquefied gas; H280
Ethanol	0 – 5	64-17-5	200-578-6	None assigned	GHS02, Flam. Liq. 2; H225

3.2 Additional Information

For full text of H/P statements see section 16.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact

Wash skin with soap and water.

Eye Contact

Flush eyes with water for at least 15 minutes while holding eyelids open.

Ingestion

Unlikely route of exposure.

4.2 Most important symptoms and effects, both acute and delayed

None anticipated.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Pressurised container: May burst if heated.

5.1 Extinguishing Media

Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Unsuitable Extinguishing Media

Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Heating may cause pressure rise with risk of bursting.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions.

SECTION 6: ACCIDENTAL RELEASE MEASURES

The product is an aerosol. It is unlikely to present spillage or leakage hazard. In case of rupture, released content should be contained as any other solvent spill.

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Wear suitable gloves and eye/face protection.

6.2 Environmental precautions

Do not release large quantities into the surface water or into drains.

6.3 Methods and material for containment and cleaning up

Collect mechanically and dispose of according to Section 13. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a lidded container for disposal or recovery. Containers must not be punctured or destroyed by burning, even when empty.

6.4 Reference to other sections

See Also Section: 8, 13.

SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Provide adequate ventilation.
Do not eat, drink or smoke during work. Wash hands thoroughly after handling.
Observe official regulations on storing packagings with pressurised containers.
- 7.2 Conditions for safe storage, including any incompatibilities**
- Storage Temperature Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C.
- Storage Life Stable under normal conditions.
- Incompatible materials None anticipated.
- 7.3 Specific end use(s)** Smoke simulation.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Butane	106-97-8	600	1450	750	1810	WEL
Ethanol	64-17-5	1000	1920	-	-	WEL

WEL: Workplace Exposure Limit (UK HSE EH40)

8.1.2 Biological limit value

Not established.

8.1.3 PNECs and DNELs

Not established.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Provide adequate ventilation.

8.2.2 Personal protection equipment

Eye/face protection



If eye contact is likely: Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection (Hand protection/ Other)



Wear suitable gloves if prolonged skin contact is likely.
Gloves: Nitrile rubber, NBR.

Respiratory protection



No personal respiratory protective equipment normally required. Handling of larger amounts: In case of insufficient ventilation, wear suitable respiratory equipment. A suitable mask with filter type A (EN14387 or EN405) may be appropriate.

Thermal hazards

Not applicable.

8.2.3 Environmental Exposure Controls

Do not release large quantities into the surface water or into drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Colourless.
Odour	Characteristic.
Odour Threshold	Not determined.
pH	Not determined.

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Melting Point/Freezing Point	Not determined.
Initial boiling point and boiling range	-44 °C
Flash Point	<0 °C
Evaporation rate	Not available.
Flammability (solid, gas)	Extremely flammable.
Upper/lower flammability or explosive limits	Explosive Limit Ranges: 1.5 – 15.0 Vol-%
Vapour pressure	4.3 bar @ 20 °C
Density	0.58 g/cm ³ @ 20 °C
Vapour density	Not determined.
Relative density	Not determined.
Solubility(ies)	Immiscible with water.
Partition coefficient: n-octanol/water	Not determined.
Ignition temperature	365 °C
Auto-ignition temperature	Product is not selfigniting.
Decomposition Temperature	Not determined.
Kinematic Viscosity	Not determined.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2 Other information	
Organic solvents – Content	96.4%

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Stable under normal conditions.
10.4 Conditions to avoid	Heat and direct sunlight.
10.5 Incompatible materials	None anticipated.
10.6 Hazardous Decomposition Product(s)	None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
11.1.1 Mixtures	
Acute toxicity	Low acute toxicity.
Irritation	Non-irritant.
Corrosivity	Not classified.
Sensitisation	It is not a skin sensitiser.
Repeated dose toxicity	None anticipated.
Carcinogenicity	No evidence of carcinogenicity.
Mutagenicity	There is no evidence of mutagenic potential.
Toxicity for reproduction	None anticipated.
Aspiration hazard	None anticipated.
11.2 Other information	None.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Low toxicity to aquatic organisms.
12.2 Persistence and degradability	The product is readily biodegradable. Unlikely to persist.
12.3 Bioaccumulative potential	The product has no potential for bioaccumulation.
12.4 Mobility in soil	Immiscible with water. The product is predicted to have low mobility in soil.
12.5 Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
12.6 Other adverse effects	None.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Non-emptied aerosol: Dispose of wastes in an approved waste disposal
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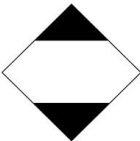
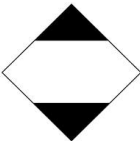


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facility. Do NOT landfill.

Disposal should be in accordance with local, state or national legislation.

13.2 Additional Information

SECTION 14: TRANSPORT INFORMATION

14.1 UN number	
ADR, IMDG, IATA	UN 1950
14.2 UN Proper Shipping Name	
ADR	1950 AEROSOLS
IMDG	AEROSOLS
IATA	AEROSOLS, Flammable
14.3 Transport hazard class(es)	
ADR	
Class / Classification	2 5F Gases.
Label	2.1
IMDG, IATA	
Class / Division	2.1
Label	2.1
14.4 Packing Group	
ADR, IMDG, IATA	None.
14.5 Environmental hazards	
Marine Pollutant	No.
14.6 Special precautions for user	Warning: Gases.
Kemler Code	-
IMDG EMS	F-D, S-U
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
14.8 Additional Information	
ADR	
Limited Quantity (LQ)	1 L
	
ADR Transport Category	2
Tunnel Restriction Code	Not applicable in Limited Quantities.
IMDG	
Limited Quantity (LQ)	1L
	
IATA	
Limited Quantity (LQ)	1L
	 
UN Model Regulation	UN 1950, AEROSOLS, 2.1

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1 EU regulations

Authorisations and/or restrictions on use

Smoke Centurion

Candidate List of Substances of Very High Concern for Authorisation

REACH: ANNEX XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

REACH: ANNEX XIV List of substances subject to authorisation

Community Rolling Action Plan (CoRAP);

15.1.2 National regulations

Wassergefährdungsklasse (Germany)

Ethanol

Technical Instructions (air)

All chemicals are not listed.

All chemicals are not listed.

All chemicals are not listed.

All chemicals are not listed.

None known.

WGK class 1

Class	Share in %
NK	50 – 100

VOC-CH

VOC-EU

Danish MAL Code

96.45%

559.4g/l

3-1

15.2 Chemical Safety Assessment

Not available.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
VPvB	very Persistent and very Bioaccumulative
WGK	Wassergefährdungsklasse (Germany)
VOC	Volatile Organic Compounds
MAL Code	Måleteknisk Arbejdshygienisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)
ADR	Accord européen relative au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG	International Maritime Code for Dangerous Goods
IATA	International Air Transport Association
Press. Gas	Gases under pressure
Flam. Gas 1	Flammable gas Category 1

Hazard Statement(s)

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.

Revision

A vertical line in the left hand margin indicates a change from the previous revision.

Disclaimers

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Annex to the extended Safety Data Sheet (eSDS)

No information available.